

Abstract

A method for identifying and isolating cells which produce secreted proteins. This method is based upon a specific characteristic or the expression level of the secreted protein by transiently capturing the secreted protein on the surface of an individual cell, allowing selection of rare cell clones from a heterogeneous population. Also provided is the use of this method to generate cells which produce a desired level of secreted protein or secreted protein of a particular characteristic(s), and organisms which possess such cells. In particular, the method allows rapid isolation of high expression recombinant antibody-producing cell lines, or may be applied directly to rapid isolation of specific hybridomas, or to the isolation of antibody-producing transgenic animals. This method is applicable for any cell which secretes protein.